



APPLICATION CERTIFICATION FCC Part 15C On Behalf of

XIAMEN COMFORT SCIENCE & TECHNOLOGY GROUP CO., LTD

Massage Chair Model No.: EC-624H, OS-Pro Alpina

FCC ID: YMX-EC624H

Prepared for XIAMEN COMFORT SCIENCE & TECHNOLOGY GROUP CO.,

(5/F)NO.168, QIANPU ROAD, SIMING DISTRICT, XIAMEN, Address

CHINA

Prepared by Shenzhen Accurate Technology Co., Ltd.

Address 1/F., Building A, Changyuan New Material Port, Science & Industry

Park, Nanshan District, Shenzhen, Guangdong, P.R. China

Tel: (0755) 26503290 Fax: (0755) 26503396

Report No. ATE20171243

Date of Test June 29-July 5, 2017

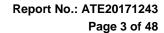
Date of Report July 5, 2017

Report No.: ATE20171243 Page 2 of 48

TABLE OF CONTENTS

Description

Test	t Report Certification	
1.	GENERAL INFORMATION	5
1.1	1. Description of Device (EUT)	5
1.2		
1.3	3. Special Accessory and Auxiliary Equipment	6
1.4	4. Description of Test Facility	6
1.5	5. Measurement Uncertainty	7
2.	MEASURING DEVICE AND TEST EQUIPMENT	8
3.	OPERATION OF EUT DURING TESTING	9
3.1	1. Operating Mode	9
3.2		
4.	TEST PROCEDURES AND RESULTS	10
5.	POWER LINE CONDUCTED MEASUREMENT	11
5.1		
5.2		
5.3		
5.4		
5.5		
5.6	5. Power Line Conducted Emission Measurement Results	12
6.	6DB BANDWIDTH MEASUREMENT	15
6.1	1. Block Diagram of Test Setup	15
6.2	2. The Requirement For Section 15.247(a)(2)	15
6.3	\mathcal{C}	
6.4		
6.5		
6.6		
	MAXIMUM PEAK OUTPUT POWER	
7.1		
7.2	1	
7.3	\mathcal{C}	
7.4 7.5		
7.6		
	POWER SPECTRAL DENSITY MEASUREMENT	
8.1 8.2		
8.3		
8.4	\boldsymbol{c}	
8.5		
8.6		
	BAND EDGE COMPLIANCE TEST	
9.1		
9.2		
9.3	1	
9.4		





9.5.	Test Procedure	26
9.6.	Test Result	26
10. RA	DIATED SPURIOUS EMISSION TEST	32
10.1.	Block Diagram of Test Setup	32
10.2.	The Limit For Section 15.247(d)	
10.3.	Restricted bands of operation	
10.4.	Configuration of EUT on Measurement	
10.5.	Operating Condition of EUT	
10.6.	Test Procedure	35
10.7.	The Field Strength of Radiation Emission Measurement Results	35
11. AN	TENNA REQUIREMENT	48
11.1.	The Requirement	48
	Antenna Construction	



Report No.: ATE20171243 Page 4 of 48

Test Report Certification

Applicant : XIAMEN COMFORT SCIENCE & TECHNOLOGY GROUP CO., LTD

Manufacturer : XIAMEN COMFORT SCIENCE & TECHNOLOGY GROUP CO., LTD

EUT Description : Massage Chair

Model No. : EC-624H, OS-Pro Alpina

(Note: We hereby state that these models are identical in interior structure, electrical circuits and components, and just model names are different for the marketing

requirement. So we prepare the EC-624H for test.)

Trade Name : N/A

Measurement Procedure Used:

FCC Rules and Regulations Part 15 Subpart C Section 15.247: 2016 ANSI C63.10: 2013

The EUT was tested according to DTS test procedure of Apr 05, 2017 KDB558074 D01 DTS Meas Guidance v04 for compliance to FCC 47CFR 15.247 requirements

The device described above is tested by Shenzhen Accurate Technology Co., Ltd. to determine the maximum emission levels emanating from the device. The maximum emission levels are compared to the FCC Part 15 Subpart C Section 15.247 limits. The measurement results are contained in this test report and Shenzhen Accurate Technology Co., Ltd. is assumed full responsibility for the accuracy and completeness of these measurements. Also, this report shows that the Equipment Under Test (EUT) is to be technically compliant with the FCC requirements.

This report applies to above tested sample only. This report shall not be reproduced in part without written approval of Shenzhen Accurate Technology Co., Ltd.

Date of Test:	June 29-July 5, 2017
Date of Report:	July 5, 2017
Prepared by :	(St. Yang Enginer)
Approved & Authorized Signer :	(Sean Liu, Manager)



Report No.: ATE20171243

Page 5 of 48

1. GENERAL INFORMATION

1.1.Description of Device (EUT)

EUT : Massage Chair

Model Number : EC-624H, OS-Pro Alpina

(Note: We hereby state that these models are identical in interior structure, electrical circuits and components, and just model names are different for the marketing requirement. So we prepare

the EC-624H for test.)

Bluetooth version : BT V4.0 LE

Frequency Range : 2402MHz-2480MHz

Number of Channels : 40

Antenna Gain : 2dBi

Antenna type : Plate loaded ceramic antenna

Power Supply : AC 110-120V/60Hz

Modulation mode : GFSK

Applicant : XIAMEN COMFORT SCIENCE & TECHNOLOGY

GROUP CO., LTD

Address : (5/F)NO.168, QIANPU ROAD, SIMING DISTRICT,

XIAMEN, CHINA

Manufacturer : XIAMEN COMFORT SCIENCE & TECHNOLOGY

GROUP CO., LTD

Address : (5/F)NO.168, QIANPU ROAD, SIMING DISTRICT,

XIAMEN, CHINA



Report No.: ATE20171243

Page 6 of 48

1.2. Carrier Frequency of Channels

Channel	Frequeeny (MHz)	Channel	Frequeeny (MHz)	Channel	Frequeeny (MHz)	Channe 1	Frequeeny (MHz)
0	2402	10	2422	20	2442	30	2462
1	2404	11	2424	21	2444	31	2464
2	2406	12	2426	22	2446	32	2466
3	2408	13	2428	23	2448	33	2468
4	2410	14	2430	24	2450	34	2470
5	2412	15	2432	25	2452	35	2472
6	2414	16	2434	26	2454	36	2474
7	2416	17	2436	27	2456	37	2476
8	2418	18	2438	28	2458	38	2478
9	2420	19	2440	29	2460	39	2480

1.3. Special Accessory and Auxiliary Equipment

PC : Manufacturer: LENOVO

M/N: 4290-RT8

S/N: R9-FW93G 11/08

1.4.Description of Test Facility

EMC Lab : Recognition of accreditation by Federal Communications

Commission (FCC)

The Designation Number is CN1189 The Registration Number is 708358

Listed by Innovation, Science and Economic Development

Canada (ISEDC)

The Registration Number is 5077A-2

Accredited by China National Accreditation Service for

Conformity Assessment (CNAS)

The Registration Number is CNAS L3193

Accredited by American Association for Laboratory

Accreditation (A2LA)

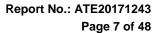
The Certificate Number is 4297.01

Name of Firm • Shenzhen Accurate Technology Co., Ltd.

Site Location . 1/F., Building A, Changyuan New Material Port, Science

& Industry Park, Nanshan District, Shenzhen, Guangdong,

P.R. China





1.5.Measurement Uncertainty

Conducted Emission Expanded Uncertainty = 2.23dB, k=2

Radiated emission expanded uncertainty = 3.08dB, k=2

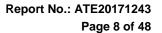
(9kHz-30MHz)

Radiated emission expanded uncertainty = 4.42dB, k=2

(30MHz-1000MHz)

Radiated emission expanded uncertainty = 4.06dB, k=2

(Above 1GHz)

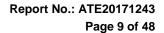




2. MEASURING DEVICE AND TEST EQUIPMENT

Table 1: List of Test and Measurement Equipment

Kind of equipment	Manufacturer	Type	S/N	Calibrated dates	Calibrated until
EMI Test Receiver	Rohde&Schwarz	ESCS30	100307	Jan. 07, 2017	1 Year
EMI Test Receiver	Rohde&Schwarz	ESPI3	101526/003	Jan. 07, 2017	1 Year
Spectrum Analyzer	Agilent	E7405A	MY45115511	Jan. 07, 2017	1 Year
Pre-Amplifier	Rohde&Schwarz	CBLU118354 0-01	3791	Jan. 07, 2017	1 Year
Loop Antenna	Schwarzbeck	FMZB1516	1516131	Jan. 13, 2017	1 Year
Bilog Antenna	Schwarzbeck	VULB9163	9163-323	Jan. 13, 2017	1 Year
Horn Antenna	Schwarzbeck	BBHA9120D	9120D-655	Jan. 13, 2017	1 Year
Horn Antenna	Schwarzbeck	BBHA9170	9170-359	Jan. 13, 2017	1 Year
LISN	Rohde&Schwarz	ESH3-Z5	100305	Jan. 07, 2017	1 Year
LISN	Schwarzbeck	NSLK8126	8126431	Jan. 07, 2017	1 Year
Highpass Filter	Wainwright	WHKX3.6/18	N/A	Jan. 07, 2017	1 Year
Band Reject Filter	Instruments Wainwright	G-10SS WRCG2400/2	N/A	Jan. 07, 2017	1 Year
. J	Instruments	485-2375/2510 -60/11SS		,	





3. OPERATION OF EUT DURING TESTING

3.1. Operating Mode

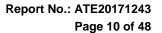
The mode is used: **BLE Transmitting mode**

Low Channel: 2402MHz Middle Channel: 2440MHz High Channel: 2480MHz

3.2.Configuration and peripherals

EUT

Figure 1 Setup: Transmitting mode





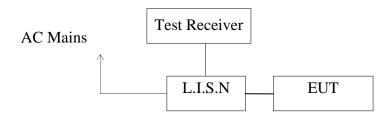
4. TEST PROCEDURES AND RESULTS

FCC Rules	Description of Test	Result
Section 15.247(a)(2)	6dB Bandwidth Test	Compliant
Section 15.247(e)	Power Spectral Density Test	Compliant
Section 15.247(b)(3)	Maximum Peak Output Power Test	Compliant
Section 15.247(d)	Band Edge Compliance Test	Compliant
Section 15.247(d) Section 15.209	Radiated Spurious Emission Test	Compliant
Section 15.207	AC Power Line Conducted Emission Test	Compliant
Section 15.203	Antenna Requirement	Compliant



5. POWER LINE CONDUCTED MEASUREMENT

5.1.Block Diagram of Test Setup



(EUT: Massage Chair)

5.2. Power Line Conducted Emission Measurement Limits

Frequency	Limit dB(μV)					
(MHz)	Quasi-peak Level	Average Level				
0.15 - 0.50	66.0 – 56.0 *	56.0 – 46.0 *				
0.50 - 5.00	56.0	46.0				
5.00 - 30.00	60.0	50.0				

NOTE1: The lower limit shall apply at the transition frequencies.

NOTE2: The limit decreases linearly with the logarithm of the frequency in the range 0.15MHz to 0.50MHz.

5.3. Configuration of EUT on Measurement

The following equipments are installed on Power Line Conducted Emission Measurement to meet the commission requirement and operating regulations in a manner, which tends to maximize its emission characteristics in a normal application.

5.4. Operating Condition of EUT

- 5.4.1. Setup the EUT and simulator as shown as Section 5.1.
- 5.4.2. Turn on the power of all equipment.
- 5.4.3. Let the EUT work in test mode and measure it.



Report No.: ATE20171243 Page 12 of 48

5.5.Test Procedure

The EUT is put on the plane 0.8 m high above the ground by insulating support and is connected to the power mains through a line impedance stabilization network (L.I.S.N.). This provides a 50ohm coupling impedance for the EUT system. Please refer the block diagram of the test setup and photographs. Both sides of AC lines are checked to find out the maximum conducted emission. In order to find the maximum emission levels, the relative positions of equipment and all of the interface cables shall be changed according to ANSI C63.10: 2013 on Conducted Emission Measurement.

The bandwidth of test receiver (R & S ESCS30) is set at 9kHz.

The frequency range from 150kHz to 30MHz is checked.

5.6. Power Line Conducted Emission Measurement Results

PASS.

The frequency range from 150kHz to 30MHz is checked.

Emissions attenuated more than 20 dB below the permissible value are not reported.

The spectral diagrams are attached as below.



ACCURATE TECHNOLOGY CO., LTD

CONDUCTED EMISSION STANDARD FCC PART 15B

EUT: Massage Chair M/N:EC-624H

Manufacturer: COMFORT Operating Condition: BT

Test Site: 1#Shielding Room

Operator: DING

Test Specification: L 120V/60Hz

Comment: Report NO.:ATE20171243 Start of Test: 2017-6-29 / 8:59:44

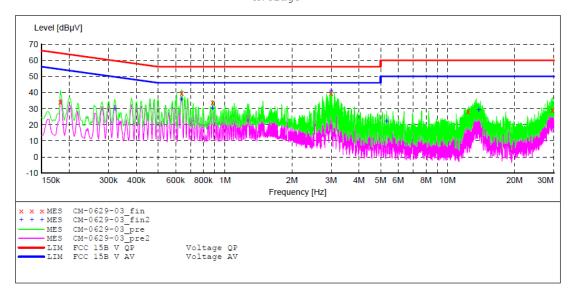
SCAN TABLE: "V 150K-30MHz fin"

Short Description: _SUB_STD_VTERM2 1.70

Start Stop Step Detector Meas. IF Transducer

Frequency Frequency Width Time Bandw. 150.0 kHz 30.0 MHz 4.5 kHz QuasiPeak 1.0 s 9 kHz NSLK8126 2008

Average



MEASUREMENT RESULT: "CM-0629-03 fin"

2	017-6-29 9:01 Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
	0.182000	34.40	10.8	64	30.0	QP	L1	GND
	0.640000	39.70	11.0	56	16.3	QP	L1	GND
	0.880000	33.80	11.1	56	22.2	QP	L1	GND
	3.000000	39.60	11.3	56	16.4	QP	L1	GND
	12.380000	28.30	11.6	60	31.7	QP	L1	GND
	29.565000	29.20	11.8	60	30.8	OP	L1	GND

MEASUREMENT RESULT: "CM-0629-03 fin2"

2017-6-29 9:03 Frequency MHz	l Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.320000	30.20	10.9	50	19.5	AV	L1	GND
0.638000	36.10	11.0	46	9.9	AV	L1	GND
0.880000	30.60	11.1	46	15.4	AV	L1	GND
3.000000	41.70	11.3	46	4.3	AV	L1	GND
5.320000	22.40	11.4	50	27.6	AV	ь1	GND
13.815000	29.40	11.6	50	20.6	AV	L1	GND



ACCURATE TECHNOLOGY CO., LTD

CONDUCTED EMISSION STANDARD FCC PART 15B

Massage Chair M/N:EC-624H

Manufacturer: COMFORT

Operating Condition: BT

Test Site: 1#Shielding Room

Operator: DING

Test Specification: N 120V/60Hz

Comment: Report NO.:ATE20171243 Start of Test: 2017-6-29 / 9:03:36

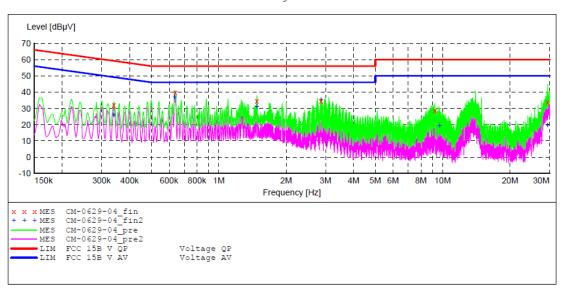
SCAN TABLE: "V 150K-30MHz fin"
Short Description: SUB_STD_VTERM2 1.70

Step TF Start Detector Meas. Transducer Stop

Time Bandw.

Frequency Frequency Width 150.0 kHz 30.0 MHz 4.5 kHz 4.5 kHz QuasiPeak 1.0 s 9 kHz NSLK8126 2008

Average



MEASUREMENT RESULT: "CM-0629-04 fin"

2017-6-29 9:07 Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.340000	32.20	10.9	59	27.0	QP	N	GND
0.640000	39.70	11.0	56	16.3	QP	N	GND
1.480000	34.70	11.2	56	21.3	QP	N	GND
2.860000	34.50	11.3	56	21.5	QP	N	GND
9.220000	28.80	11.6	60	31.2	QP	N	GND
29.390000	33.90	11.8	60	26.1	QP	N	GND

MEASUREMENT RESULT: "CM-0629-04 fin2"

2017-6-29 9:07 Frequency MHz		Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.340000	26.30	10.9	49	22.9	AV	N	GND
0.636000	37.10	11.0	46	8.9	AV	N	GND
1.480000	31.20	11.2	46	14.8	AV	N	GND
2.860000	35.20	11.3	46	10.8	AV	N	GND
9.675000	19.60	11.6	50	30.4	AV	N	GND
29.390000	19.80	11.8	50	30.2	AV	N	GND

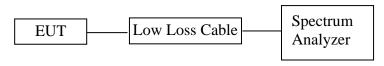


Report No.: ATE20171243

Page 15 of 48

6. 6DB BANDWIDTH MEASUREMENT

6.1.Block Diagram of Test Setup



(EUT: Massage Chair)

6.2. The Requirement For Section 15.247(a)(2)

Section 15.247(a)(2): Systems using digital modulation techniques may operate in the 902-928MHz, 2400-2483.5MHz, and 5725-5850MHz bands. The minimum 6 dB bandwidth shall be at least 500 kHz.

6.3.EUT Configuration on Measurement

The equipment is installed on the emission measurement to meet the commission requirements and operating regulations in a manner which tends to maximize its emission characteristics in normal application.

6.4. Operating Condition of EUT

- 6.4.1. Setup the EUT and simulator as shown as Section 6.1.
- 6.4.2. Turn on the power of all equipment.
- 6.4.3.Let the EUT work in TX modes measure it. The transmit frequency are 2402-2480MHz. We select 2402MHz, 2440MHz, and 2480MHz TX frequency to transmit.

6.5.Test Procedure

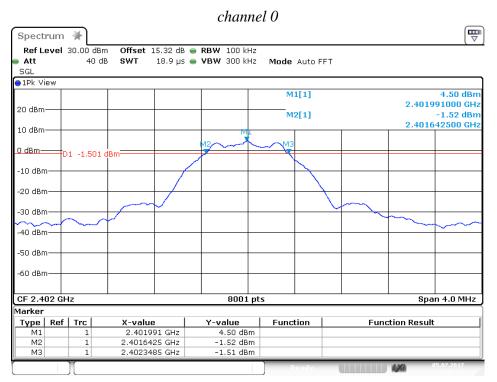
- 6.5.1. The transmitter output was connected to the spectrum analyzer through a low loss cable.
- 6.5.2.Set RBW of spectrum analyzer to 100 kHz and VBW to 300 kHz.
- 6.5.3. The 6dB bandwidth is defined as the total spectrum the power of which is higher than peak power minus 6dB.



6.6.Test Result

Channel	Frequency (MHz)	6 dB Bandwith (MHz)	Minimum Limit(MHz)	PASS/FAIL
0	2402	0.706	0.5	PASS
19	2440	0.690	0.5	PASS
39	2480	0.688	0.5	PASS

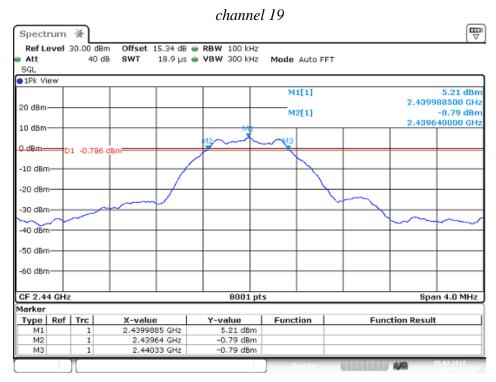
The spectrum analyzer plots are attached as below.



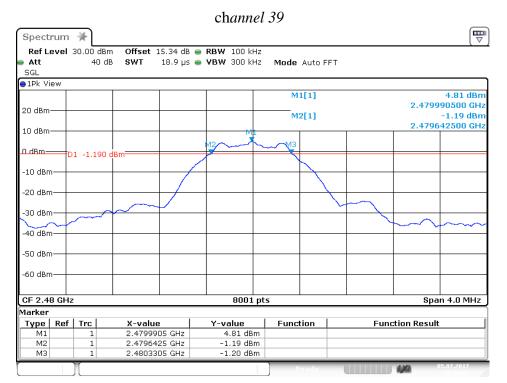
Date: 5.JUL.2017 18:02:17



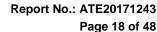
Page 17 of 48



Date: 5. JUL.2017 18:08:13



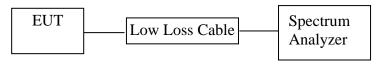
Date: 5.JUL.2017 18:09:02





7. MAXIMUM PEAK OUTPUT POWER

7.1.Block Diagram of Test Setup



(EUT: Massage Chair)

7.2. The Requirement For Section 15.247(b)(3)

Section 15.247(b)(3): For systems using digital modulation in the 902-928MHz, 2400-2483.5MHz, and 5725-5850MHz bands: 1 Watt.

7.3.EUT Configuration on Measurement

The equipment are installed on the emission Measurement to meet the commission requirements and operating regulations in a manner which tends to maximize its emission characteristics in normal application.

7.4. Operating Condition of EUT

- 7.4.1. Setup the EUT and simulator as shown as Section 7.1.
- 7.4.2. Turn on the power of all equipment.
- 7.4.3.Let the EUT work in TX modes measure it. The transmit frequency are 2402-2480MHz. We select 2402MHz, 2440MHz, and 2480MHz TX frequency to transmit.

7.5. Test Procedure

- 7.5.1. The transmitter output was connected to the spectrum analyzer through a low loss cable.
- 7.5.2.Set RBW of spectrum analyzer to 1 MHz and VBW to 3MHz.
- 7.5.3.Measurement the maximum peak output power.

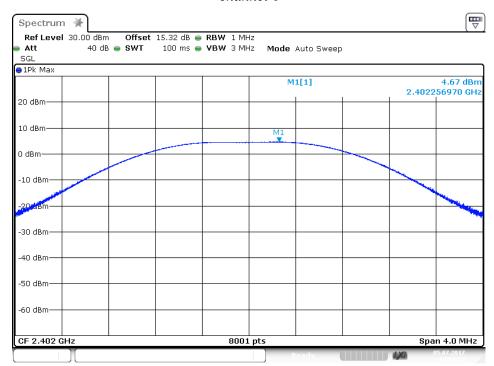


7.6.Test Result

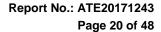
Channel	Frequency (MHz)	Peak Power Output (dBm)	Peak Power Limit (dBm)	Pass / Fail
0	2402	4.67	30	PASS
19	2440	5.33	30	PASS
39	2480	5.04	30	PASS

The spectrum analyzer plots are attached as below.

channel 0

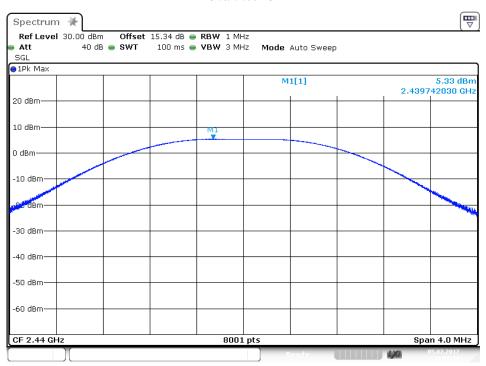


Date: 5.JUL.2017 18:02:25



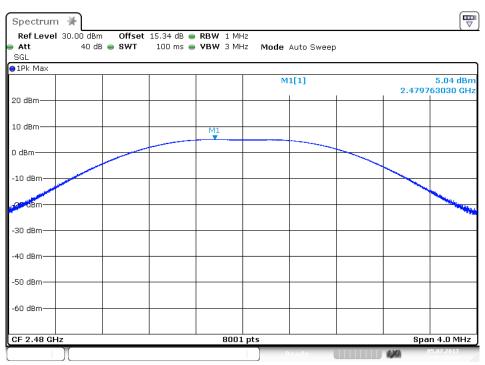


channel 19



Date: 5.JUL.2017 18:08:21

channel 39



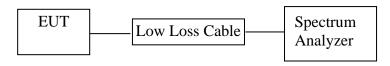
Date: 5.JUL.2017 18:09:10

Report No.: ATE20171243 Page 21 of 48



8. POWER SPECTRAL DENSITY MEASUREMENT

8.1.Block Diagram of Test Setup



(EUT: Massage Chair)

8.2. The Requirement For Section 15.247(e)

Section 15.247(e): For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission.

8.3.EUT Configuration on Measurement

The equipment are installed on the emission Measurement to meet the commission requirements and operating regulations in a manner which tends to maximize its emission characteristics in normal application.

8.4. Operating Condition of EUT

- 8.4.1. Setup the EUT and simulator as shown as Section 8.1.
- 8.4.2. Turn on the power of all equipment.
- 8.4.3.Let the EUT work in TX modes measure it. The transmit frequency are 2402-2480MHz. We select 2402MHz, 2440MHz, and 2480MHz TX frequency to transmit.



Report No.: ATE20171243

Page 22 of 48

8.5.Test Procedure

- 8.5.1. The transmitter output was connected to the spectrum analyzer through a low loss cable.
- 8.5.2.Measurement Procedure PKPSD:
- 8.5.3. This procedure must be used if maximum peak conducted output power was used to demonstrate compliance to the fundamental output power limit, and is optional if the maximum (average) conducted output power was used to demonstrate compliance.
 - 1. Set analyzer center frequency to DTS channel center frequency.
 - 2. Set the span to 1.5 times the DTS channel bandwidth.
 - 3. Set the RBW to: $3 \text{ kHz} \leq \text{RBW} \leq 100 \text{ kHz}$.
 - 4. Set the VBW \geq 3 x RBW.
 - 5. Detector = peak.
 - 6. Sweep time = auto couple.
 - 7. Trace mode = max hold.
 - 8. Allow trace to fully stabilize.
 - 9. Use the peak marker function to determine the maximum amplitude level.
 - 10. If measured value exceeds limit, reduce RBW (no less than 3kHz) and repeat.
- 8.5.4. Measurement the maximum power spectral density.

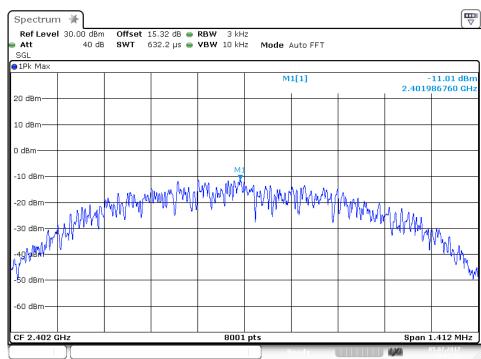


8.6.Test Result

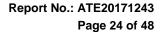
CHANNEL NUMBER	FREQUENCY (MHz)	PSD (dBm/3KHz)	LIMIT (dBm/3KHz)	PASS/FAIL
0	2402	-11.01	8	PASS
19	2440	-10.15	8	PASS
39	2480	-10.99	8	PASS

The spectrum analyzer plots are attached as below.

 $channel\ 0$

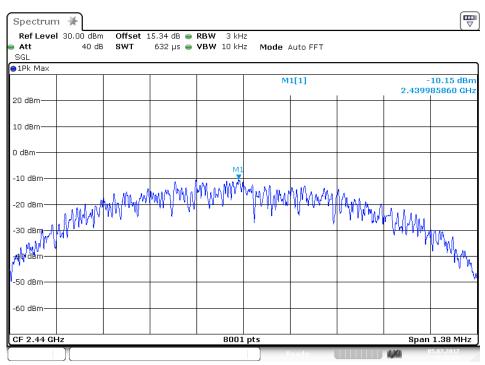


Date: 5.JUL.2017 18:02:32



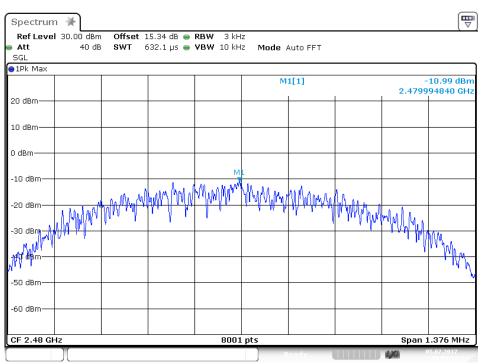


channel 19

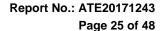


Date: 5.JUL.2017 18:08:29

channel 39



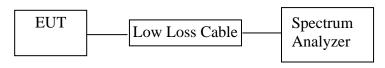
Date: 5.JUL.2017 18:09:18





9. BAND EDGE COMPLIANCE TEST

9.1.Block Diagram of Test Setup



(EUT: Massage Chair)

9.2. The Requirement For Section 15.247(d)

Section 15.247(d): In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in Section 15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in Section 15.209(a).

9.3.EUT Configuration on Measurement

The equipment are installed on the emission Measurement to meet the commission requirements and operating regulations in a manner which tends to maximize its emission characteristics in normal application.

9.4. Operating Condition of EUT

- 9.4.1. Setup the EUT and simulator as shown as Section 9.1.
- 9.4.2. Turn on the power of all equipment.
- 9.4.3.Let the EUT work in TX modes measure it. The transmit frequency are 2402-2480MHz. We select 2402MHz, 2480MHz TX frequency to transmit.



Report No.: ATE20171243

Page 26 of 48

9.5.Test Procedure

Conducted Band Edge:

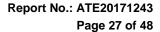
- 9.5.1.The transmitter output was connected to the spectrum analyzer via a low loss cable.
- 9.5.2.Set RBW of spectrum analyzer to 100 kHz and VBW to 300 kHz.
- 9.5.3. Radiate Band Edge:
- 9.5.4. The EUT is placed on a turntable, which is 1.5m above the ground plane and worked at highest radiated power.
- 9.5.5. The turntable was rotated for 360 degrees to determine the position of maximum emission level.
- 9.5.6.EUT is set 3m away from the receiving antenna, which is varied from 1m to 4m to find out the highest emission.
- 9.5.7.Set the spectrum analyzer in the following setting in order to capture the lower and upper band-edges of the emission:
- 9.5.8.RBW=1MHz, VBW=1MHz
- 9.5.9. The band edges was measured and recorded.

9.6.Test Result

Pass

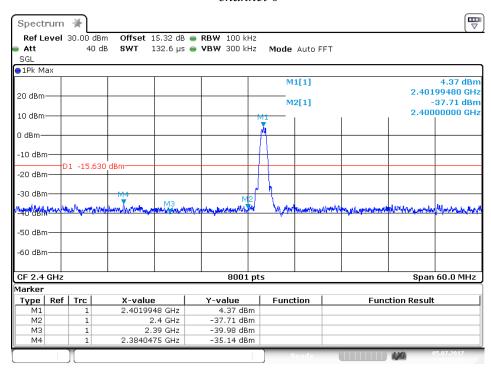
Conducted Band Edge Result

Channel	Frequency	Delta peak to band emission	Limit(dBc)
0	2.402GHz	33.34	20
39	2.480GHz	33.07	20



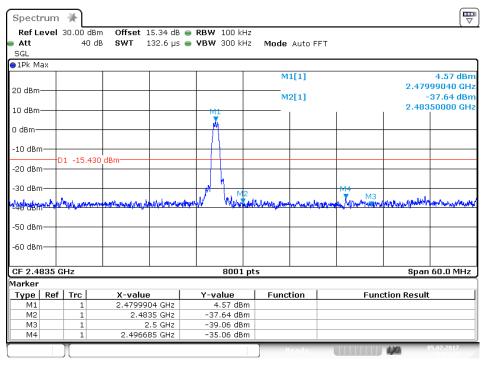


channel 0



Date: 5.JUL.2017 18:02:40

channel 39



Date: 5.JUL.2017 18:09:25



Radiated Band Edge Result

Report No.: ATE20171243 Page 28 of 48



ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park,Nanshan Shenzhen,P.R.China Site: 1# Chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Job No.: DING #3825 Polarization: Horizontal

Standard: FCC PK Power Source: AC 120V/60Hz

 Test item:
 Radiation Test
 Date: 17/06/29/

 Temp.(C)/Hum.(%) 25 C / 55 %
 Time: 14/33/00

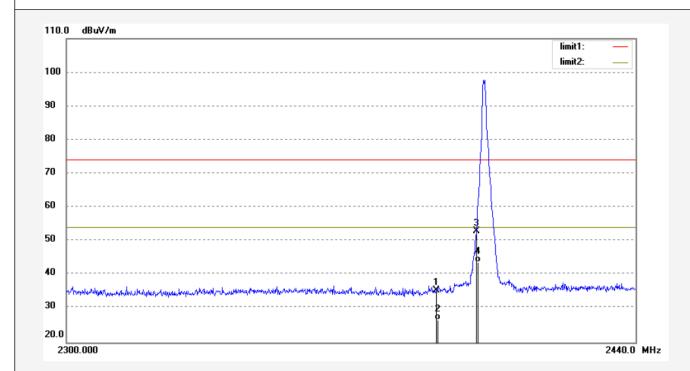
EUT: Massage Chair Engineer Signature: DING Mode: TX 2402MHz Distance: 3m

loue. 1 \ 2402\vinz Distance. 311

Model: EC-624H

Manufacturer: COMFORT

Note: Report NO.:ATE20171243



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2390.000	41.22	-5.89	35.33	74.00	-38.67	peak			
2	2390.000	32.48	-5.89	26.59	54.00	-27.41	AVG			
3	2400.000	58.79	-5.80	52.99	74.00	-21.01	peak			
4	2400.000	49.63	-5.80	43.83	54.00	-10.17	AVG			



ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park,Nanshan Shenzhen,P.R.China Site: 1# Chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Report No.: ATE20171243

Page 29 of 48

Job No.: DING #3824 Polarization: Vertical

Standard: FCC PK Power Source: AC 120V/60Hz

 Test item:
 Radiation Test
 Date: 17/06/29/

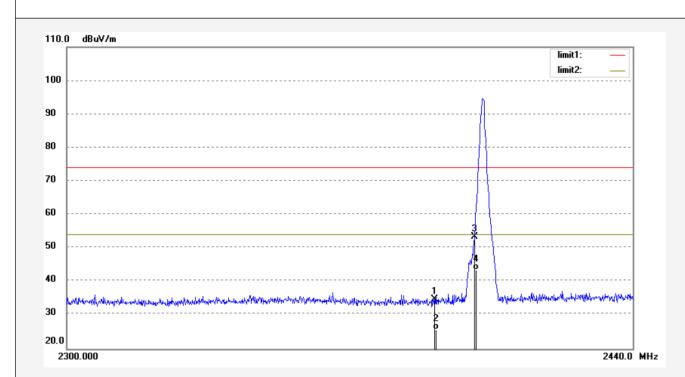
 Temp.(C)/Hum.(%) 25 C / 55 %
 Time: 14/30/32

EUT: Massage Chair Engineer Signature: DING
Mode: TX 2402MHz Distance: 3m

Model: EC-624H

Note: Report NO.:ATE20171243

Manufacturer: COMFORT



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2390.000	40.55	-5.89	34.66	74.00	-39.34	peak			
2	2390.000	31.67	-5.89	25.78	54.00	-28.22	AVG			
3	2400.000	59.29	-5.80	53.49	74.00	-20.51	peak			
4	2400.000	49.22	-5.80	43.42	54.00	-10.58	AVG			



ACCURATE TECHNOLOGY CO., LTD.

Site: 1# Chamber Tel:+86-0755-26503290

Report No.: ATE20171243

Page 30 of 48

F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park, Nanshan Shenzhen, P.R. China

Fax:+86-0755-26503396

Job No.: DING #3826 Polarization: Horizontal Standard: FCC PK

Power Source: AC 120V/60Hz

Test item: Radiation Test Date: 17/06/29/ Temp.(C)/Hum.(%) 25 C / 55 % Time: 14/35/40

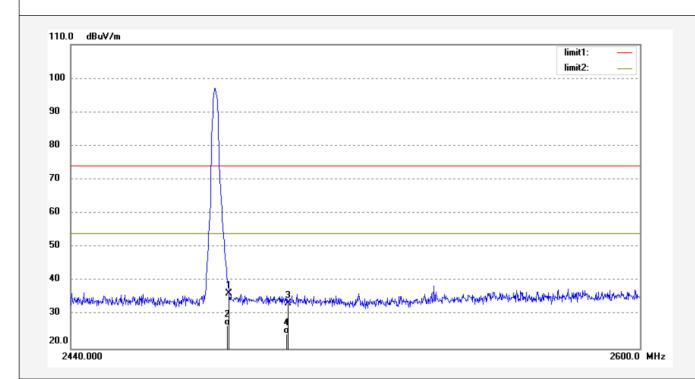
Engineer Signature: DING

EUT: Massage Chair Mode: TX 2480MHz Model: EC-624H

Distance: 3m

Manufacturer: COMFORT

Note: Report NO.:ATE20171243



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2483.500	41.72	-5.51	36.21	74.00	-37.79	peak			
2	2483.500	32.46	-5.51	26.95	54.00	-27.05	AVG			
3	2500.000	38.94	-5.50	33.44	74.00	-40.56	peak			
4	2500.000	29.82	-5.50	24.32	54.00	-29.68	AVG			



ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park,Nanshan Shenzhen,P.R.China Site: 1# Chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Report No.: ATE20171243

Page 31 of 48

Job No.: DING #3827 Standard: FCC PK

Test item: Radiation Test

Temp.(C)/Hum.(%) 25 C / 55 %

EUT: Massage Chair Mode: TX 2480MHz Model: EC-624H

Manufacturer: COMFORT

Note: Report NO.:ATE20171243

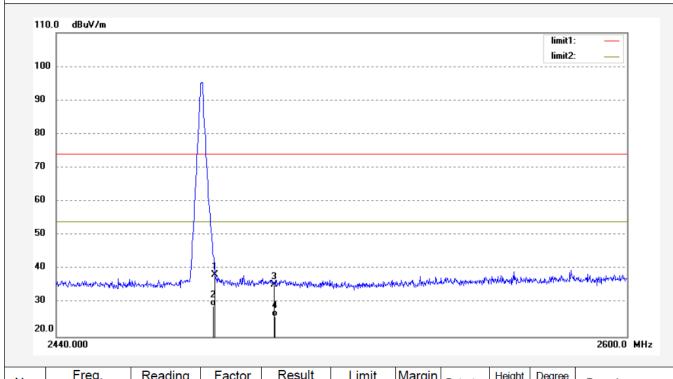
Polarization: Vertical

Power Source: AC 120V/60Hz

Date: 17/06/29/ Time: 14/37/17

Engineer Signature: DING

Distance: 3m

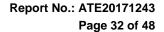


No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2483.500	43.78	-5.51	38.27	74.00	-35.73	peak			
2	2483.500	34.69	-5.51	29.18	54.00	-24.82	AVG			
3	2500.000	40.88	-5.50	35.38	74.00	-38.62	peak			
4	2500.000	31.42	-5.50	25.92	54.00	-28.08	AVG			

Note:

- 1. Emissions attenuated more than 20 dB below the permissible value are not reported.
- 2. The field strength is calculated by adding the antenna factor, high pass filter loss(if used) and cable loss, and subtracting the amplifier gain(if any)from the measured reading. The basic equation calculation is as follows:

Result = Reading + Corrected Factor

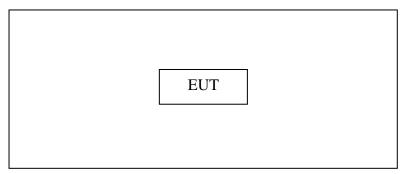




10. RADIATED SPURIOUS EMISSION TEST

10.1.Block Diagram of Test Setup

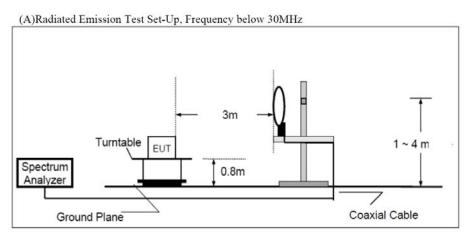
10.1.1.Block diagram of connection between the EUT and peripherals



Setup: Transmitting mode

(EUT: Massage Chair)

10.1.2.Semi-Anechoic Chamber Test Setup Diagram



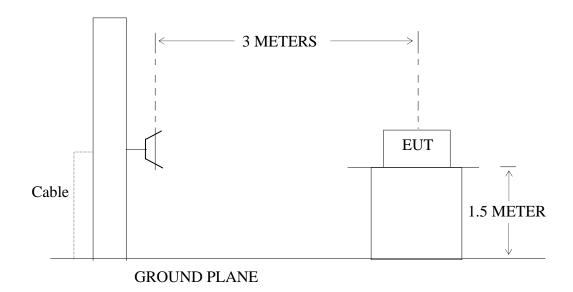
(B)Radiated Emission Test Set-Up, Frequency 30-1000MHz

Turntable
Spectrum
Analyzer
Ground Plane

Coaxial Cable



(C) Radiated Emission Test Set-Up, Frequency above 1GHz



10.2. The Limit For Section 15.247(d)

Section 15.247(d): In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in Section 15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in Section 15.209(a).



Report No.: ATE20171243 Page 34 of 48

10.3.Restricted bands of operation

10.3.1.FCC Part 15.205 Restricted bands of operation

(a) Except as shown in paragraph (d) of this section, Only spurious emissions are permitted in any of the frequency bands listed below:

MHz	MHz	MHz	GHz
0.090-0.110	16.42-16.423	399.9-410	4.5-5.15
¹ 0.495-0.505	16.69475-16.69525	608-614	5.35-5.46
2.1735-2.1905	16.80425-16.80475	960-1240	7.25-7.75
4.125-4.128	25.5-25.67	1300-1427	8.025-8.5
4.17725-4.17775	37.5-38.25	1435-1626.5	9.0-9.2
4.20725-4.20775	73-74.6	1645.5-1646.5	9.3-9.5
6.215-6.218	74.8-75.2	1660-1710	10.6-12.7
6.26775-6.26825	108-121.94	1718.8-1722.2	13.25-13.4
6.31175-6.31225	123-138	2200-2300	14.47-14.5
8.291-8.294	149.9-150.05	2310-2390	15.35-16.2
8.362-8.366	156.52475-156.52525	2483.5-2500	17.7-21.4
8.37625-8.38675	156.7-156.9	2690-2900	22.01-23.12
8.41425-8.41475	162.0125-167.17	3260-3267	23.6-24.0
12.29-12.293	167.72-173.2	3332-3339	31.2-31.8
12.51975-12.52025	240-285	3345.8-3358	36.43-36.5
12.57675-12.57725	322-335.4	3600-4400	$\binom{2}{}$
13.36-13.41			

¹Until February 1, 1999, this restricted band shall be 0.490-0.510

(b) Except as provided in paragraphs (d) and (e), the field strength of emission appearing within these frequency bands shall not exceed the limits shown in Section 15.209. At frequencies equal to or less than 1000MHz, Compliance with the limits in Section 15.209 shall be demonstrated using measurement instrumentation employing a CISPR quasi-peak detector. Above 1000MHz, compliance with the emission limits in Section15.209 shall be demonstrated based on the average value of the measured emissions. The provisions in Section 15.35 apply to these measurements.

10.4. Configuration of EUT on Measurement

The equipment are installed on Radiated Emission Measurement to meet the commission requirements and operating regulations in a manner which tends to maximize its emission characteristics in normal application.

²Above 38.6



Report No.: ATE20171243

Page 35 of 48

10.5. Operating Condition of EUT

- 10.5.1. Setup the EUT and simulator as shown as Section 10.1.
- 10.5.2. Turn on the power of all equipment.
- 10.5.3.Let the EUT work in TX modes measure it. The transmit frequency are 2402-2480MHz. We select 2402MHz, 2440MHz, and 2480MHz TX frequency to transmit.

10.6.Test Procedure

The EUT and its simulators are placed on a turntable, which is 0.8 meter high above ground(Below 1GHz). The EUT and its simulators are placed on a turntable, which is 1.5 meter high above ground(Above 1GHz). The turntable can rotate 360 degrees to determine the position of the maximum emission level. EUT is set 3.0 meters away from the receiving antenna, which is mounted on an antenna tower. The antenna can be moved up and down between 1.0 meter and 4 meters to find out the maximum emission level. Broadband antenna (calibrated bi-log antenna) is used as receiving antenna. Both horizontal and vertical polarizations of the antenna are set on measurement. In order to find the maximum emission levels, all of the EUT location must be manipulated according to ANSI C63.10:2013 on radiated emission measurement. The EUT was tested in 3 orthogonal planes.

The bandwidth of test receiver is set at 9 kHz in below 30MHz. and set at 120 kHz in 30-1000MHz, and 1MHz in above 1000MHz.

The frequency range from 9 kHz to 26.5GHz is checked.

The final measurement in band 9-90 kHz, 110-490 kHz and above 1000MHz is performed with Average detector. Except those frequency bands mention above, the final measurement for frequencies below 1000MHz is performed with Quasi Peak detector.

The field strength is calculated by adding the antenna factor, and cable loss, and subtracting the amplifier gain from the measured reading. The basic equation calculation is as follows:

Result = Reading + Corrected Factor

Where Corrected Factor = Antenna Factor + Cable Loss - Amplifier Gain

10.7. The Field Strength of Radiation Emission Measurement Results **PASS**.

Note: 1. Emissions attenuated more than 20 dB below the permissible value are not reported.

- 2. *: Denotes restricted band of operation.
- 3. The radiation emissions from 9kHz-30MHz and 18-26.5GHz are not reported, because the test values lower than the limits of 20dB.



Below 1GHz

Report No.: ATE20171243 Page 36 of 48



ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park,Nanshan Shenzhen,P.R.China Site: 1# Chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Job No.: yjzh #1303

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 25 C / 55 %

EUT: Massage Chair Mode: TX 2402MHz Model: EC-624H

Manufacturer: COMFORT

Note: Report NO.:ATE20171243

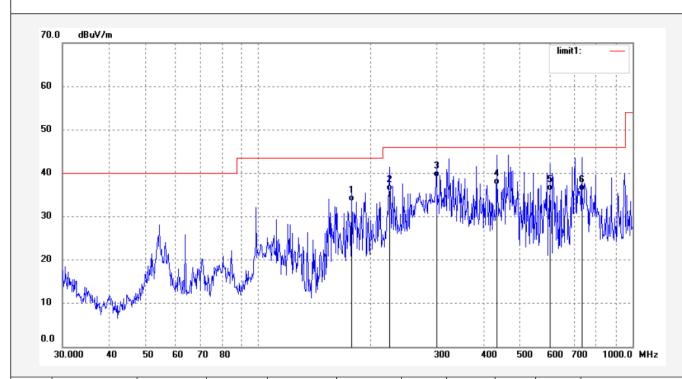
Polarization: Horizontal

Power Source: AC 120V/60Hz

Date: 2017/06/29 Time: 18:25:18

Engineer Signature: DING

Distance: 3m



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	177.5175	53.49	-20.01	33.48	43.50	-10.02	QP			
2	224.6357	54.21	-18.29	35.92	46.00	-10.08	QP			
3	299.6440	55.13	-16.06	39.07	46.00	-6.93	QP			
4	433.3396	49.67	-12.24	37.43	46.00	-8.57	QP			
5	600.8138	44.69	-8.71	35.98	46.00	-10.02	QP			
6	731.4627	42.81	-6.77	36.04	46.00	-9.96	QP			



F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park,Nanshan Shenzhen,P.R.China Site: 1# Chamber Tel:+86-0755-26503290

Fax:+86-0755-26503396

Report No.: ATE20171243

Page 37 of 48

Job No.: yjzh #1304

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 25 C / 55 %

EUT: Massage Chair Mode: TX 2402MHz Model: EC-624H Manufacturer: COMFORT

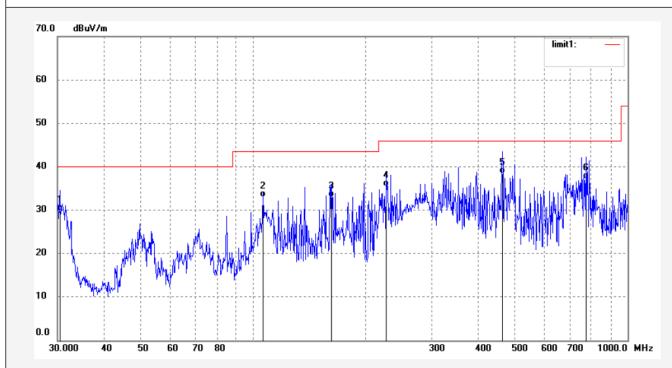
Note: Report NO.:ATE20171243

Polarization: Vertical

Power Source: AC 120V/60Hz

Date: 2017/06/29 Time: 18:33:10

Engineer Signature: DING



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	30.4246	45.69	-15.80	29.89	40.00	-10.11	QP			
2	106.2810	53.14	-20.20	32.94	43.50	-10.56	QP			
3	162.0197	53.85	-20.87	32.98	43.50	-10.52	QP			
4	227.0164	53.59	-18.23	35.36	46.00	-10.64	QP			
5	463.2561	50.14	-11.72	38.42	46.00	-7.58	QP			
6	773.7612	42.99	-5.84	37.15	46.00	-8.85	QP		·	



F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park, Nanshan Shenzhen, P.R. China

Page 38 of 48 Site: 1# Chamber Tel:+86-0755-26503290

Fax:+86-0755-26503396

Report No.: ATE20171243

Job No.: yjzh #1306 Polarization: Horizontal

Standard: FCC Class B 3M Radiated

Test item: Radiation Test Temp.(C)/Hum.(%) 25 C / 55 % Time: 18:45:58

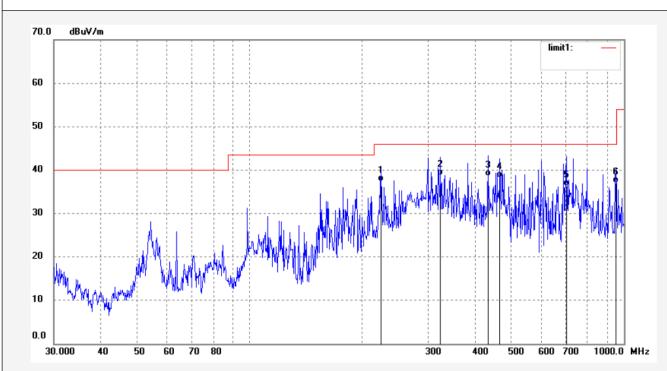
EUT: Massage Chair Mode: TX 2440MHz Model: EC-624H Manufacturer: COMFORT

Note: Report NO.:ATE20171243

Power Source: AC 120V/60Hz

Date: 2017/06/29

Engineer Signature:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	224.6357	55.64	-18.29	37.35	46.00	-8.65	QP			
2	323.7250	54.03	-15.18	38.85	46.00	-7.15	QP			
3	433.3396	50.76	-12.24	38.52	46.00	-7.48	QP			
4	466.5230	49.87	-11.65	38.22	46.00	-7.78	QP			
5	703.7314	43.71	-7.31	36.40	46.00	-9.60	QP			
6	952.0000	40.22	-3.25	36.97	46.00	-9.03	QP			



F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 1# Chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Report No.: ATE20171243

Page 39 of 48

Job No.: yjzh #1305

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 25 C / 55 %

EUT: Massage Chair Mode: TX 2440MHz Model: EC-624H

Manufacturer: COMFORT

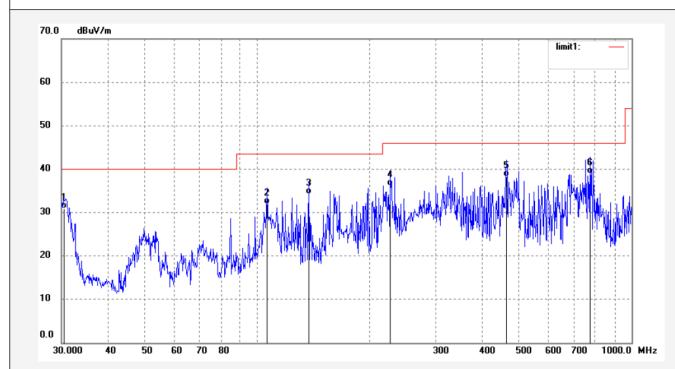
Note: Report NO.:ATE20171243

Polarization: Vertical

Power Source: AC 120V/60Hz

Date: 2017/06/29 Time: 18:39:50

Engineer Signature: DING



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	30.4246	46.75	-15.80	30.95	40.00	-9.05	QP			
2	106.2810	52.16	-20.20	31.96	43.50	-11.54	QP			
3	137.3565	55.41	-21.20	34.21	43.50	-9.29	QP			
4	227.0164	54.32	-18.23	36.09	46.00	-9.91	QP			
5	463.2561	50.01	-11.72	38.29	46.00	-7.71	QP			
6	773.7612	44.74	-5.84	38.90	46.00	-7.10	QP			



F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park,Nanshan Shenzhen,P.R.China Page 40 of 48

Site: 1# Chamber
Tel:+86-0755-26503290

Fax:+86-0755-26503396

Report No.: ATE20171243

Job No.: yjzh #1307

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 25 C / 55 %

EUT: Massage Chair Mode: TX 2480MHz Model: EC-624H

Manufacturer: COMFORT

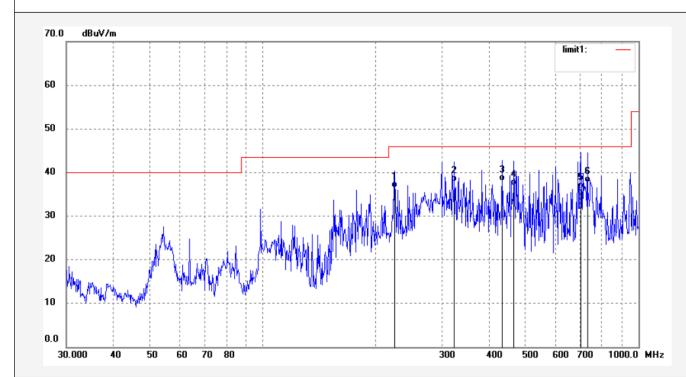
Note: Report NO.:ATE20171243

Polarization: Horizontal

Power Source: AC 120V/60Hz

Date: 2017/06/29 Time: 18:55:44

Engineer Signature: DING



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	224.6357	54.78	-18.29	36.49	46.00	-9.51	QP			
2	323.7250	53.12	-15.18	37.94	46.00	-8.06	QP			
3	433.3396	50.30	-12.24	38.06	46.00	-7.94	QP			
4	466.5230	48.59	-11.65	36.94	46.00	-9.06	QP			
5	703.7314	43.64	-7.31	36.33	46.00	-9.67	QP			
6	731.4627	44.51	-6.77	37.74	46.00	-8.26	QP			



F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 1# Chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Report No.: ATE20171243

Page 41 of 48

Job No.: yjzh #1308

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 25 C / 55 %

EUT: Massage Chair Mode: TX 2480MHz Model: EC-624H

Manufacturer: COMFORT

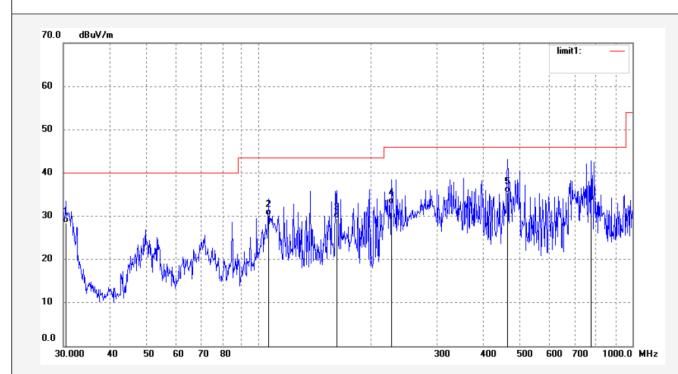
Note: Report NO.:ATE20171243

Polarization: Vertical

Power Source: AC 120V/60Hz

Date: 2017/06/29 Time: 19:03:12

Engineer Signature: DING



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	30.4246	44.16	-15.80	28.36	40.00	-11.64	QP			
2	106.2810	50.47	-20.20	30.27	43.50	-13.23	QP			
3	162.0197	50.36	-20.87	29.49	43.50	-14.01	QP			
4	227.0164	50.96	-18.23	32.73	46.00	-13.27	QP			
5	463.2561	47.12	-11.72	35.40	46.00	-10.60	QP			
6	773.7612	39.41	-5.84	33.57	46.00	-12.43	QP			



Above 1GHz

Report No.: ATE20171243 Page 42 of 48

Site: 1# Chamber Tel:+86-0755-26503290

Fax:+86-0755-26503396



ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park,Nanshan Shenzhen,P.R.China

Polarization: Horizontal

Power Source: AC 120V/60Hz

Date: 17/06/29/ Time: 14/08/52

Engineer Signature: DING

Distance: 3m

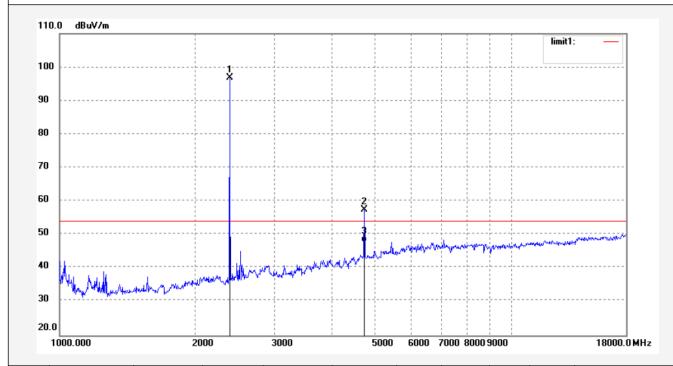
Job No.: DING #3818

Standard: FCC Class B 3M Radiated

Test item: Radiation Test
Temp.(C)/Hum.(%) 25 C / 55 %

EUT: Massage Chair Mode: TX 2402MHz

Model: EC-624H Manufacturer: COMFORT



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2402.019	102.77	-5.98	96.79			peak			
2	4804.057	54.21	3.15	57.36	74.00	-16.64	peak			
3	4804.057	44.53	3.15	47.68	54.00	-6.32	AVG			



F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park,Nanshan Shenzhen,P.R.China Page 43 of 48

Site: 1# Chamber
Tel:+86-0755-26503290

Fax:+86-0755-26503396

Report No.: ATE20171243

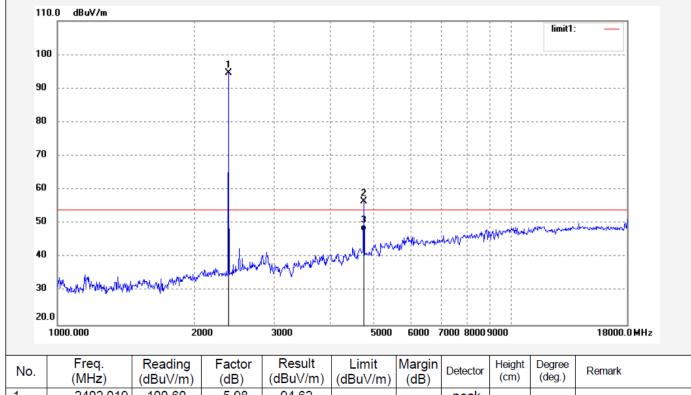
Job No.: DING #3819 Polarization: Vertical

Standard: FCC Class B 3M Radiated Power Source: AC 120V/60Hz

Test item: Radiation Test Date: 17/06/29/
Temp.(C)/Hum.(%) 25 C / 55 % Time: 14/11/20

EUT: Massage Chair Engineer Signature: DING Mode: TX 2402MHz Distance: 3m

Model: EC-624H
Manufacturer: COMFORT



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)		Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2402.019	100.60	-5.98	94.62			peak			
2	4804.057	53.47	3.15	56.62	74.00	-17.38	peak			
3	4804.057	44.67	3.15	47.82	54.00	-6.18	AVG			



F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park,Nanshan Shenzhen,P.R.China Site: 1# Chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Horizontal

Report No.: ATE20171243

Page 44 of 48

Job No.: DING #3821 Polarization:

Standard: FCC Class B 3M Radiated Power Source: AC 120V/60Hz

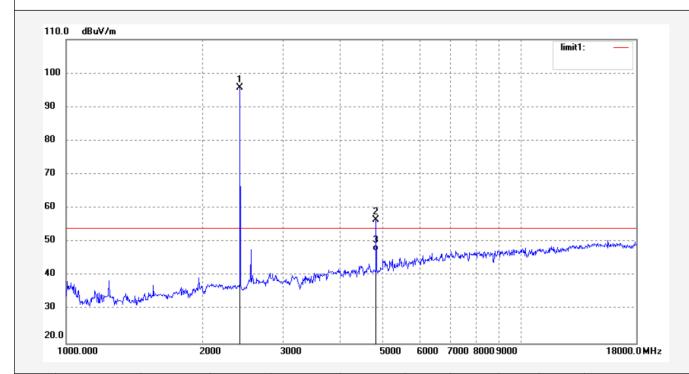
Test item: Radiation Test Date: 17/06/29/
Temp.(C)/Hum.(%) 25 C / 55 % Time: 14/18/55

EUT: Massage Chair Engineer Signature: DING

Mode: TX 2440MHz Distance: 3m

Model: EC-624H

Manufacturer: COMFORT



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2440.021	101.46	-5.72	95.74			peak			
2	4880.324	52.95	3.67	56.62	74.00	-17.38	peak			
3	4880.324	43.62	3.67	47.29	54.00	-6.71	AVG			



F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park,Nanshan Shenzhen,P.R.China Page 45 of 48

Site: 1# Chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Report No.: ATE20171243

Polarization: Vertical

Power Source: AC 120V/60Hz

Date: 17/06/29/ Time: 14/16/46

Engineer Signature: DING

Distance: 3m

Job No.: DING #3820

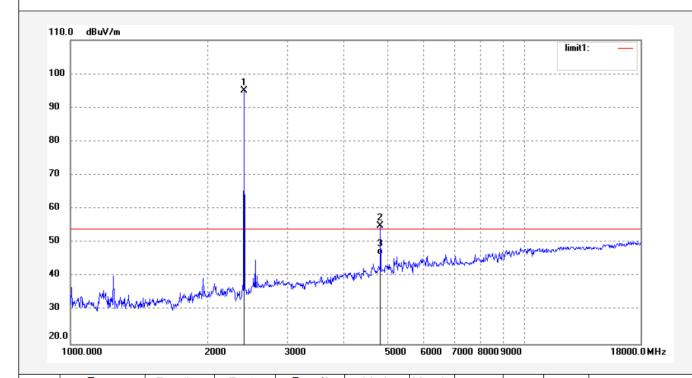
Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 25 C / 55 %

EUT: Massage Chair Mode: TX 2440MHz Model: EC-624H

Manufacturer: COMFORT



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2440.600	100.69	-5.76	94.93			peak			
2	4880.324	51.25	3.67	54.92	74.00	-19.08	peak			
3	4880.324	42.78	3.67	46.45	54.00	-7.55	AVG			



F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park,Nanshan Shenzhen,P.R.China Site: 1# Chamber Tel:+86-0755-26503290

Fax:+86-0755-26503396

Report No.: ATE20171243

Page 46 of 48

Job No.: DING #3822

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 25 C / 55 %

EUT: Massage Chair Mode: TX 2480MHz Model: EC-624H

Manufacturer: COMFORT

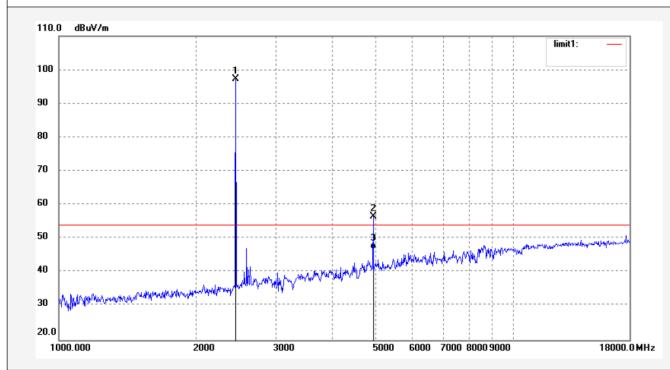
Note: Report NO.:ATE20171243

Polarization: Horizontal

Power Source: AC 120V/60Hz

Date: 17/06/29/ Time: 14/20/47

Engineer Signature: DING



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2480.034	102.80	-5.55	97.25			peak			
2	4960.444	51.94	4.54	56.48	74.00	-17.52	peak			
3	4960.444	42.36	4.54	46.90	54.00	-7.10	AVG			



F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 1# Chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Report No.: ATE20171243

Page 47 of 48

Job No.: DING #3823

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 25 C / 55 %

EUT: Massage Chair Mode: TX 2480MHz

Manufacturer: COMFORT

Model:

EC-624H

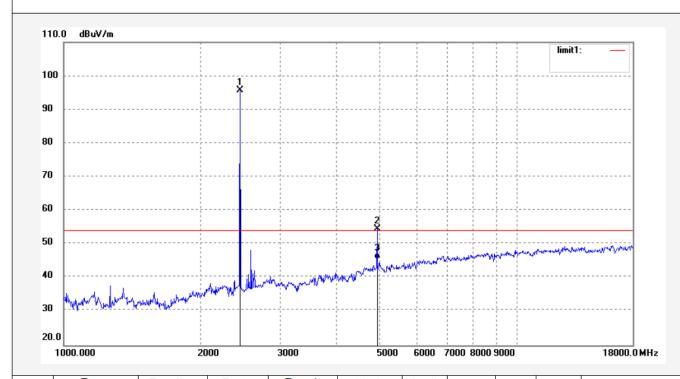
Note: Report NO.:ATE20171243

Polarization: Vertical

Power Source: AC 120V/60Hz

Date: 17/06/29/ Time: 14/22/01

Engineer Signature: DING



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2480.034	101.30	-5.55	95.75			peak			
2	4960.444	49.99	4.54	54.53	74.00	-19.47	peak			
3	4960.444	40.94	4.54	45.48	54.00	-8.52	AVG			



11.ANTENNA REQUIREMENT

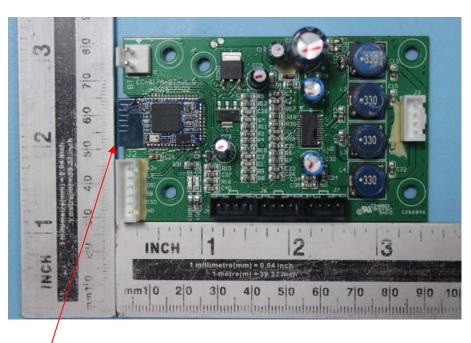
11.1.The Requirement

According to Section 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device.

11.2.Antenna Construction

Device is equipped with permanent attached antenna, which isn't displaced by other antenna. The Antenna gain of EUT is 2 dBi. Therefore, the equipment complies with the antenna requirement of Section 15.203.





Antenna

----- THE END OF TEST REPORT -----